

Gun Trucks for Force Protection



**Presented to the House Committee on Armed Services
May 5, 2005**

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Executive Summary

- **31 five ton Gun Trucks are in Iraq and saving lives**
 - More are needed



A Gun Truck crew survived a recent Improvised Explosive Device (IED) attack

Armor has been removed and mounted on a new truck that's back on the road



“Sir,

I was the driver of the 5 Ton that was struck by the IED. I had six other soldiers in that vehicle at the time of the incident. All seven are breathing today”

A lighter weight troop carrier version of the armored box has also protected soldiers' lives



At the request of the HASC, the troop carrier boxes were produced by the Army using a modified LLNL design and Stryker steel



"Here is one of the pictures from the VBIED 30 Nov 04. There were 14 soldiers in the back and all walked away to include the folks in the cab, the car was a 4 door sedan packed and it pulled along side the truck."

Comparison of 5-Ton Gun Trucks & M1114 Up-Armored HMMWV for Convoy Escort

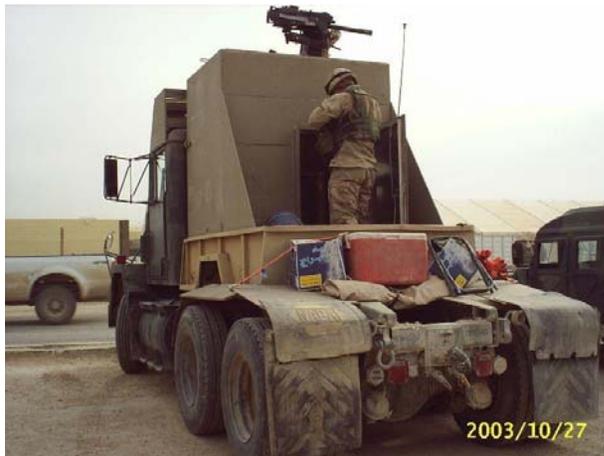
Advantage

Characteristic	5-ton Gun Truck	M1114
Top Speed		
Acceleration		
Maneuverability		
Armor Protection		
Armament		
Cost (up-armor conversion)		
Interior Protected Space		
Crew/Troop Carrier		
Situational Awareness		
Repairability		
Flexibility		

The most effective convoy escort is with both types of vehicles



5-ton gun trucks are being produced in the field from armor plate and scrap metal



Gun Truck Design Approach

- Start with the 5+ years of experience in Viet Nam
- Use modern, low-cost and readily available armor to survive IED attack
- Get prototypes in field ASAP and collect feedback from users



Gun Truck Project Timeline



Field prototype.
ONS for 28 kits.



IED attack

HASC Call
for support

Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar

2003

Design, build, &
test prototype

2004

Build & field
30 kits

2005

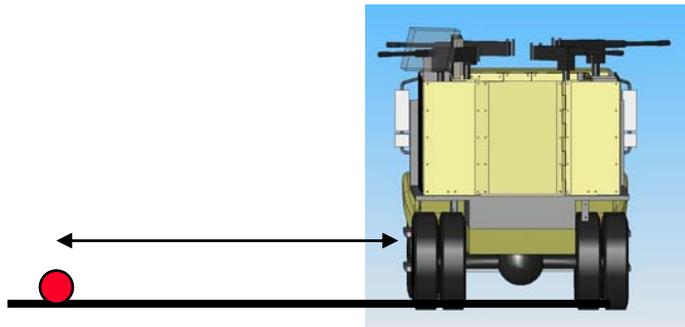


A Gun Truck needs several crew-served weapons



- **Reasons for multiple guns (Viet Nam lessons learned)**
 - Greater firepower
 - Redundancy when weapons malfunction
 - Repel simultaneous attacks from multiple directions
- **Gun Truck companies have had difficulty obtaining multiple crew-served weapons**

The armored box and ballistic windows stop all frags from typical IED



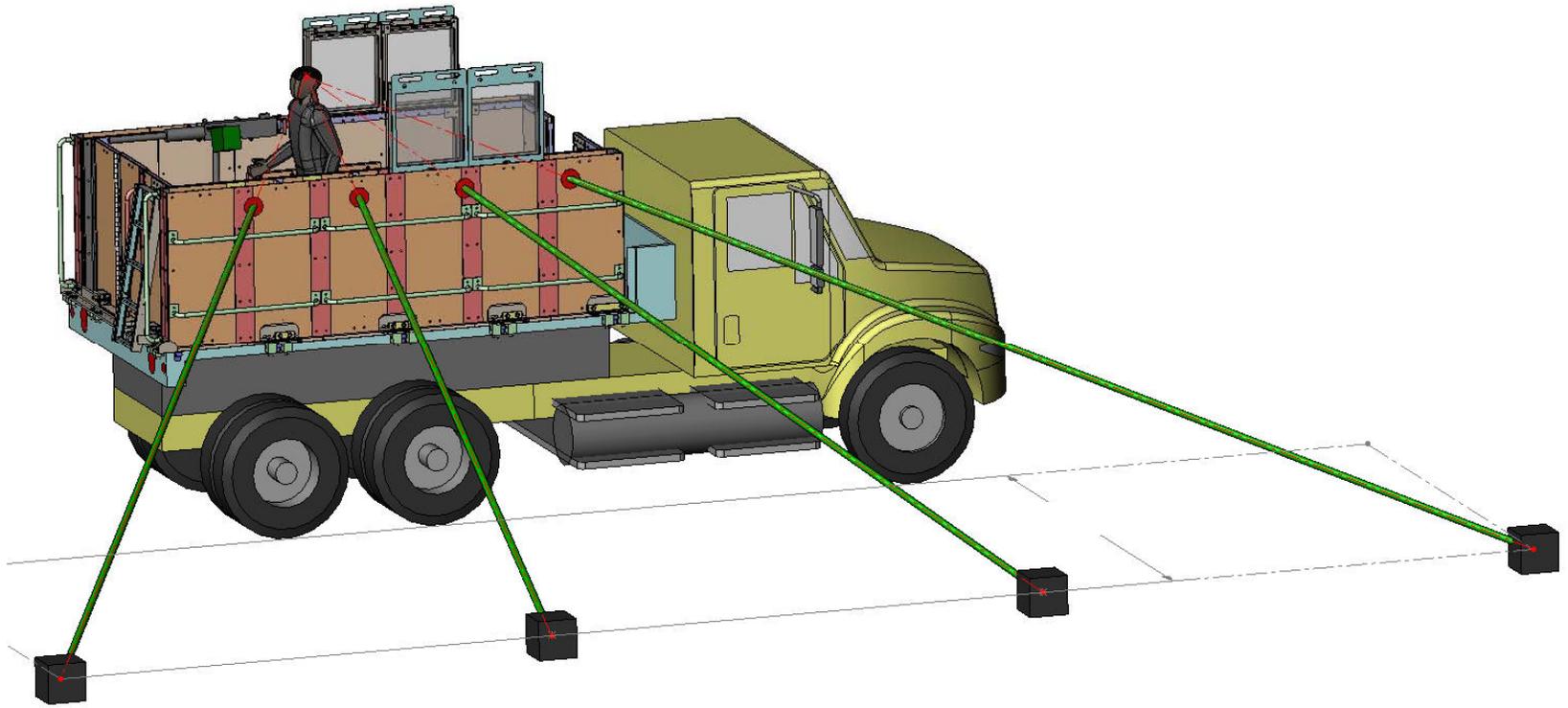
IED



The box armor also protects against all attending frags and blast from an RPG

Testing performed at Aberdeen Test Center,
Army Developmental Test Command

5-ton Gun Truck Protection Against IEDs



Frag from IEDs do not reach gunner

There are 31 LLNL/DARPA Gun Trucks performing missions in Iraq



Feedback from field has been very positive.



Many DoD organizations provided critical support to the 5-ton gun truck kit development and fielding



- U.S. Army Developmental Test Command, Aberdeen Test Center
 - Ballistic testing
 - Road testing
 - Gun mount design



- Army Research Lab
 - Armor materials and performance
 - RPG defeat
 - Lessons learned from ASK



- USMC
 - Albany GA Logistics Base (initial M923 cab armor design)



- Tank & Automotive Command
 - Shipment of kits to field



Summary: \$40K Per Gun Truck Kit Just Add Troops and Guns

- **Gunners and crew have excellent IED survivability.**
- **Provides convoy security, troop transport, and perimeter and checkpoint security.**
- **Gun Crew has high Situational Awareness while protected.**
- **Easy in-field installation and repair.**
- **Total kit weight does not exceed vehicle capacity.**
- **Easy to produce kits in quantity.**
- **Survivability and firepower far exceed M1114.**

